

09/463,423

1-17. (CANCELED).

18. (CURRENTLY AMENDED) A method for oxidizing selenium, vanadium, <  
nickle, arsenic, manganese, cerium or uranium in an aqueous solution comprising the <  
steps of:

(i) supplying an oxidizable source of sulphur as a photoabsorber, and  
oxygen to the solution; and

(ii) irradiating the solution with UV light such that the selenium, vanadium, <  
nickle, arsenic, manganese, cerium or uranium is oxidized. <

19. (PREVIOUSLY PRESENTED) The method as claimed in claim 18, wherein  
the oxidizable source of sulphur is chosen from the group consisting of one or more of  
 $\text{SO}_3^{2-}$ ,  $\text{SO}_2(\text{g})$ , aqueous  $\text{S}_2\text{O}_3^{2-}$ ,  $\text{HSO}_3^-$ ,  $\text{S}_2\text{O}_3^{2-}$  and  $\text{S}_4\text{O}_6^{2-}$ .

20. (PREVIOUSLY PRESENTED) The method as claimed in claim 18, wherein  
the inorganic species is present in the aqueous solution in trace quantities.

21. (CANCELED)

22. (PREVIOUSLY PRESENTED) The method as claimed in claim 18, wherein  
the wavelength of UV light is less than 300 nm.

23. (PREVIOUSLY PRESENTED) The method as claimed in claim 18, wherein  
the oxygen supplied to the solution is derived from air.

24. (PREVIOUSLY PRESENTED) The method as claimed in claim 18, wherein  
the oxygen supplied to the solution has a partial pressure of about 0.2 atmospheres.

25. (PREVIOUSLY PRESENTED) The method as claimed in claim 18, wherein  
the aqueous solution is one of: drinking water, industrial waste water, or an industrial  
process liquor.

26-29. (CANCELED)

09/463,423

30. (CURRENTLY AMENDED) A method of oxidizing at least one of selenium, vanadium, nickle, arsenic, manganese, cerium and uranium in an aqueous solution, the method comprising the steps of:

- (i) supplying an oxidizable source of sulphur as a photoabsorber to the solution;
- (ii) supplying oxygen to the solution; and
- (iii) irradiating the solution with UV light such that oxidation of at least one of the selenium, vanadium, nickle, arsenic, manganese, cerium and uranium occurs.